

**AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A multi-functional actuator comprising:
  - a housing having an internal space and a groove in the inner side;
  - a sound-generating diaphragm with an outer end fixed to the upper end of said housing;
  - a voice coil fixed to the bottom of said diaphragm;
  - a vertically magnetized magnet;
  - an upper plate attached to said magnet for forming a magnet circuit;
  - a yoke for forming the magnetic circuit together with said magnet;
  - a weight for defining a vibration body together with said yoke;
  - a leaf spring fixed into said grooves of the housing and having a portion of curvature which is a bending portion radially bent in an outer circumferential portion of said leaf spring; and
  - a vibrating coil installed in said housing for generating vibration using a magnetic flux formed in a magnetic system.
2. (Previously Presented) The multi-functional actuator according to claim 1, wherein said leaf spring is provided in a pair, and at least one of said springs has the portion of curvature.
3. (Previously Presented) The multi-functional actuator according to claim 1, wherein said leaf spring is provided as one.
4. (Previously Presented) The multi-functional actuator according to claim 1, wherein said portion of curvature of the leaf spring is in elastic portions.
5. (Previously Presented) The multi-functional actuator according to claim 1, wherein said portion of curvature of the leaf spring is in the circumferential direction.

6. (Previously Presented) The multi-functional actuator according to claim 1,  
wherein said portion of curvature of the leaf spring is provided in plural  
number.

7. (Canceled)

8. (Previously Presented) The multi-functional actuator according to claim 1,  
wherein said portion of curvature of the leaf spring is a twisting portion.

9. (Canceled)

10. (Canceled)

11. (Currently Amended) The multi-functional actuator according to claim 1 7,  
~~wherein said bending portion of the leaf spring is radially bent in an outer  
circumferential portion of said leaf spring, and smoothly shaped at the  
bending portion and the adjacent right and left ends.~~

12. (Currently Amended) The multi-functional actuator according to claim 1 7,  
~~wherein said bending portion of the leaf spring is radially bent in an outer  
circumferential portion of said leaf spring, and linearly shaped at the bending  
portion and the adjacent right and left ends.~~

13. (Currently Amended) A multi-functional actuator comprising:  
a housing having an internal space in the inner side;  
a coil installed in said housing;  
a magnet;  
a yoke for forming the magnetic circuit together with said magnet; and  
at least one leaf spring fixed in the housing and having a portion of curvature;  
said portion of curvature of the leaf spring being a bending portion  
radially bent in an outer circumferential portion of said leaf spring.

14. (Previously Presented) The multi-functional actuator according to claim 13, wherein said portion of curvature of the leaf spring is in elastic portions.

15. (Previously Presented) The multi-functional actuator according to claim 13, wherein said portion of curvature of the leaf spring is in the circumferential direction.

16. (Canceled)

17. (Previously Presented) The multi-functional actuator according to claim 13, wherein said portion of curvature of the leaf spring is a twisting portion.

18. (Canceled)

19. (Canceled)

20. (Currently Amended) The multi-functional actuator according to claim 13 ~~16~~, wherein said bending portion of the leaf spring is radially bent in an outer circumferential portion of said leaf spring, and smoothly shaped at the bending portion and the adjacent right and left ends.

21. (Currently Amended) The multi-functional actuator according to claim 13 ~~16~~, wherein said bending portion of the leaf spring is radially bent in an outer circumferential portion of said leaf spring, and linearly shaped at the bending portion and the adjacent right and left ends.

22. (Currently Amended) A multi-functional actuator comprising:

- a housing having an internal space in the inner side;
- a sound-generating diaphragm with an outer end fixed to the upper end of said housing;
- a coil fixed to the bottom of said diaphragm;
- a magnet;
- a yoke for forming the magnetic circuit together with said magnet; and

at least one leaf spring fixed in the housing and having a portion of curvature  
being a bending portion which is radially bent in an outer circumferential  
portion of said leaf spring.

23. (Previously Presented) The multi-functional actuator according to claim 22,  
wherein said portion of curvature of the leaf spring is in elastic portions.

24. (Previously Presented) The multi-functional actuator according to claim 22,  
wherein said portion of curvature of the leaf spring is in the circumferential  
direction.

25. (Canceled)

26. (Previously Presented) The multi-functional actuator according to claim 22,  
wherein said portion of curvature of the leaf spring is a twisting portion.

27. (Canceled)

28. (Canceled)

29. (Currently Amended) The multi-functional actuator according to claim 22 25,  
wherein said bending portion of the leaf spring is radially bent in an outer  
circumferential portion of said leaf spring, and smoothly shaped at the  
bending portion and the adjacent right and left ends.

30. (Currently Amended) The multi-functional actuator according to claim 22 25,  
wherein said bending portion of the leaf spring is radially bent in an outer  
circumferential portion of said leaf spring, and linearly shaped at the bending  
portion and the adjacent right and left ends.